

LAW OFFICES OF  
WILLIAM J. FRANKLIN,  
CHARTERED

1919 PENNSYLVANIA AVENUE, N.W.  
SUITE 300  
WASHINGTON, D.C. 20006-3404

(202) 736-2233  
TELECOPIER (202) 452-8757  
AND (202) 223-6739

September 13, 1995

Mr. William F. Caton  
Acting Secretary,  
Federal Communications Commission  
1919 M Street, N.W., Room 222  
Washington, D.C. 20554

RECEIVED

SEP 13 1995

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Re: **ROAMER ONE, INC.**  
PR Docket No. 89-552  
GN Docket No. 93-252  
Comments of Roamer One, Inc.

DOCKET FILE COPY ORIGINAL

Dear Mr. Caton:

Submitted herewith on behalf of Roamer One, Inc. ("Roamer"), are an original and nine (9) copies of its Comments to be filed in the above-referenced matter.

Kindly contact my office directly with any questions or comments regarding this submission.

Respectfully submitted,

*William J. Franklin*

William J. Franklin  
Attorney for Roamer One, Inc.

Encs.  
cc: Roamer One, Inc.

019  
No. of Copies rec'd  
LAW OFFICE

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

RECEIVED

SEP 13 1995

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of

Amendment of Part 90 of the  
Commission's Rules to Provide  
for the Use of the 220-222 MHz  
Band by the Private Land Mobile  
Radio Service

PR Docket No. 89-552

Implementation of Sections 3(n)  
and 332 of the Communications  
Act

GN Docket No. 93-252

DOCKET FILE COPY ORIGINAL

To: The Commission

**COMMENTS OF ROAMER ONE, INC.**

Roamer One, Inc. ("Roamer"), by its attorney and pursuant to Section 1.415 of the Commission's Rules, hereby comments on the Commission's proposal to permit the modification of existing authorizations in the 220-222 MHz band in the Private Land Mobile Radio Service.<sup>1/</sup>

The Commission has correctly acted in proposing rules which will permit the modification of existing 220-222 MHz authorizations. The present lack of modification procedures has created the situation in which Roamer and others have attempted to jump-start a new communications service with a patchwork of initial licenses and continuing special temporary authorizations. Subject to the modifications proposed herein, Roamer urges the Commission to adopt such rules expeditiously.

---

<sup>1/</sup> Modification of 220-222 MHz Authorizations, 10 FCC Rcd (FCC 95-381, released August 29, 1995) (Fourth Notice of Proposed Rulemaking) ("4th NPRM")

## DESCRIPTION OF ROAMER

Roamer (formerly known as Simrom, Inc.) is a wholly owned subsidiary of Intek Diversified Corporation ("Intek"), a publicly traded Delaware corporation. Founded and staffed by experienced communications personnel, Roamer's sole business function is to construct and manage 220 MHz SMR systems across the country. Roamer has participated actively in the Commission's CMRS and Competitive Bidding rulemakings.

Roamer placed its first 220 MHz SMR system in operation during February 1994. Starting in August 1994, Roamer began placing equipment orders for the various systems it manages. At present, Roamer is operating approximately eighty-five (85) 220 MHz SMR systems, and has shipped RF equipment or begun installation for approximately fifty-five (55) more systems.

Roamer and Intek have entered into a contractual agreement with Simmonds Communications, Ltd ("SCL") for the supply of infrastructure equipment, technical assistance, and engineering design concerning the build-out of 220 MHz transmitter sites managed by Roamer on behalf of a number of licensees.<sup>2/</sup>

Thus, Roamer possesses a demonstrated expertise in the development, management, and operation of 220 MHz radio systems.

---

<sup>2/</sup> Intek recently signed a letter of intent to acquire the wireless products division of NovAtel Communications Ltd., which acquisition will give Intek a state-of-the-art RF manufacturing facility to produce subscriber 220 Mhz radios for Roamer-managed systems and others. Intek also has signed definitive agreements to acquire the wireless businesses of SCL, which includes the SCL Systems Group (specializing in wide-area network development and large systems integration), Midland International Corporation (fourth largest supplier of land-mobile products in the United States), and Midland Europe Ltd. (which distributes Midland equipment to Canada and western Europe).

For this reason, the Commission should accord extra weight to Roamer's Comments.

**I. THE PUBLIC INTEREST WOULD NOT BE SERVED IF THE COMMISSION WERE TO REVISE THE 220-222 MHz PHASE I LICENSING RULES IN MID-STREAM.**

As the Commission well knows, development of the 220-222 MHz radio service has been hindered by lengthy licensing challenges, the resulting unavailability of 220-222 MHz radio equipment in volume, and indeed, the Commission's failure to accept modifications applications for operating 220-222 MHz systems. Despite these obstacles, Roamer and other entrepreneurs have worked diligently to develop the 220-222 MHz industry. To date, those efforts appear to be successful, as increasing numbers of 220-222 MHz systems become operational.

STA Licensing Issues. Because 220-222 MHz modification applications were not being accepted, the Commission staff encouraged licensees to apply for continuing Special Temporary Authority to relocate their stations. Such relocations were required by extrinsic forces as the unavailability of transmitter sites at the completion of licensing, coverage problems from the licensed sites, or interference (intermodulation) problems which developed when multiple 220-222 MHz stations were licensed for the same antenna structure.<sup>3/</sup>

AMTA studies have determined that more than half of all operating 220 MHz systems are installed at non-initial sites pursuant to STA. Under the Commission's proposal, each of those

---

<sup>3/</sup> This intermodulation occurs because of the narrowband characteristics and channel spacing in the 220-222 MHz band, and was not anticipated in advance of actual system operations.

sites would be required to reduce power and/or discontinue operations in order to maintain a theoretical "service contour" based on another site.<sup>4/</sup> Reducing available 220-222 MHz service by more than half would not serve the public interest.

The 220-222 MHz industry will not be successful -- and any 220-222 MHz auctions will not bring high bids -- if existing systems shut down. Slashing demand for 220-222 MHz radio equipment could well cause manufacturers to drop their 220-222 MHz product lines in favor of other products with continuing demand. If 220-222 MHz equipment is unavailable, scarce, or expensive, demand for services in that band will not develop.

The Commission has articulated (4th NPRM, ¶9) a "policy goal of facilitating the delivery of [220-222 MHz] service to consumers." It is irrational to require more than half of all operating 220-222 MHz systems to shut down or reduce power in order to "facilitate" service.

Service Contour Issues. Moreover, the determination of a 220-222 MHz "service contour" in this proceeding would not serve the public interest. Existing licensees (and manufacturers) have invested substantial sums in reliance upon the current regulatory structure. These licensees should be permitted to build out their initial business plan before the rules change.

Specifically, the Commission should not define a 220-222 MHz protected service contour in this proceeding.<sup>5/</sup> The efficient

---

<sup>4/</sup> See 4th NPRM, ¶16.

<sup>5/</sup> Moreover, the Commission's proposed adoption of a 28-mile (38 dBu) service contour is almost certainly wrong. Existing 220-222 MHz systems routinely provide service for an approxi-  
(continued...)

modification of existing systems in this proceeding (i.e., without the acceptance of mutually exclusive applications) is legally and factually distinct from the protection of existing, modified systems in the face of Phase II (area) licensing.

**II. SUPERIOR MODIFICATION SCHEMES CAN BE ADOPTED WITHOUT CREATING OPPORTUNITIES FOR ENCROACHMENTS INTO MAJOR MARKETS OR MUTUALLY EXCLUSIVE APPLICATIONS.**

The 4th NPRM articulates two concerns in proposing the extremely limited modification proposal set forth therein. First, the Commission was concerned with avoiding mutual exclusivity between modification applications:

[W]e believe that it is important to avoid cases of mutual exclusivity resulting from base station relocations. Resolution of these competing applications would further delay the completion of construction, thus frustrating our policy goal of facilitating the delivery of the service to consumers.<sup>5/</sup>

Second, the Commission was concerned that any modification scheme other than its proposal would permit substantial encroachments into adjacent, major markets:

We believe that any alternative [modification proposal] which would permit Phase I licensees to file license modifications establishing significantly different geographic service areas would be problematic and would delay service to the public if mutually exclusive applications result.<sup>7/</sup>

---

<sup>5/</sup>(...continued)  
mate 50-mile radius. In response to the Commission's Second Memorandum Opinion and Order and Third Notice of Proposed Rule-making in this docket (FCC 95-312, released August 28, 1995) ("2nd MO&O/3rd NPRM"), the Commission should develop a complete record as to the actual 220-222 MHz service contours before adopting Phase II rules.

<sup>6/</sup> 4th NPRM, ¶9.

<sup>7/</sup> 4th NPRM, ¶14.

From Roamer's knowledge and experience in the 220-22 MHz industry, those concerns can be addressed without adopting the Commission's limited modification proposal.

The AMTA Proposal. Specifically, Roamer supports the modification proposal advanced by AMTA's 220 MHz Council in this proceeding:

- Existing 220-222 MHz licenses may relocate towards each other while maintaining the minimum 120 km separation distance to avoid mutual exclusivity, with a maximum relocation of the lesser of (a) 35 km or (b) one-half of the excess of the separation distance between two licensees over 120 km.
- Existing licensees may relocate towards each other without maintaining the minimum 120 km separation distance if they include the other licensee's written consent to the relocation in their modification application, again avoiding mutual exclusivity.<sup>8/</sup>
- Whenever a relocating licensee's authorized site is within 190 km ( $=120 \text{ km} + [35 \text{ km} \times 2]$ ) of multiple co-channel licensees, the two modification rules proposed above would be applied with respect to each co-channel station separately.

By definition, AMTA's proposal prevents modification applications from resulting in mutually exclusive filings. Under this proposal, any application which produces mutual exclusivity would violate the rules and be subject to summary dismissal.<sup>9/</sup> Thus, the AMTA proposal satisfies the Commission's concern regarding mutual exclusivity.

---

<sup>8/</sup> This relocation should also be subject to a maximum relocation of 35 km.

<sup>9/</sup> This proposal would not add to the Commission's work load. At present and under any modification proposal, the Commission's processing staff must examine each application to determine if it violates the rules. Verification of relocation and separation distances can be done by computer, and the implementation of AMTA's proposal -- perhaps unlike the Commission's proposal -- can be completely automated.

Market Encroachment. In Roamer's experience, the Commission's concern regarding non-mutual-exclusive market encroachment is unrealistic. Specifically, Roamer engineers have surveyed all major markets to determine the potential degree of encroachment under any relocation scenario. Without exception, Roamer found that major markets already have most of the available QT channels already licensed in their metropolitan areas.<sup>10/</sup> Thus, encroachment into major markets is not possible because the existing authorized channels are already licensed in each market.

Attachment A hereto is Roamer's encroachment/licensing map for St. Louis, Missouri. Roamer selected St. Louis because it is a mid-size major market (rather than New York, Los Angeles, or Chicago), and its licensing pattern is representative of major markets as a whole. For St. Louis, Roamer found that 17 of the 20 possible QT channel groups were already licensed within 10 miles of the center of St. Louis.<sup>11/</sup> Additional licensing of those channel groups into St. Louis through relocation simply is not possible.

---

<sup>10/</sup> This is not surprising; the original 220 MHz applicants filed most of their applications in the areas with the greatest likely demand for communications services, i.e., in major markets.

<sup>11/</sup> In fact, Roamer's data understates the existing licensee preclusion effect. Of the three QT channel-groups not shown on Roamer's data, one is located 10.34 miles from the center of St. Louis. The other two apparently are also licensed for downtown St. Louis (based on their transmitter street address), but have their coordinates incorrectly entered into the Commission's database. In other words, every 220-222 MHz QT channel group is now licensed for the St. Louis metropolitan area, and no encroachment via relocation is possible.



Based on this data, it is unrealistic for the Commission to base its rulemaking decisions on the possibility of market encroachment; the existing patterns of 220 MHz licensing preclude market encroachment even if relocation is permitted.

Fill-In Transmitters. Based on its experience, Roamer has concluded that the Commission's proposal (4th NPRM, ¶10) to allow additional "fill-in" transmitters is not helpful in most situations. The cost of additional tower rentals, equipment purchases, telco T-1 lines, and the like make the cost of covering an area with low-power repeaters commercially prohibitive. While fill-in transmitters might be justified in areas of high demand, in general they are not an adequate substitute for permitting existing licensees to modify their systems in a realistic manner.

Summary. AMTA's Comments describe in detail why its proposal, permitting non-mutually exclusive short-distance relocations, serves the public interest far better than the Commission's proposal. For the reasons stated both in these Comments and therein, Roamer urges the Commission to adopt the AMTA relocation proposal.

**III. IN THE EVENT THAT THE COMMISSION ADOPTS ITS PRESENT PROPOSAL, THAT PROPOSAL REQUIRES SUBSTANTIAL MODIFICATION AND CLARIFICATION.**

Although Roamer believes that the public interest would be far better served if the Commission were to adopt AMTA's relocation proposal, Roamer also notes that the Commission's proposal requires substantial modification and clarification to be viable as a competing proposal.

First, to the extent that the Commission bases any modification criteria on a licensee's existing 38 dBu contours,<sup>12/</sup> the Commission should define that contour on the basis of the maximum possible ERP and antenna height at the licensed site. This would make 220-222 MHz licensing consistent with competitive services such as 800 MHz and 900 MHz SMR. Further, this would not penalize licensees who initially proposed a lower power with the realistic expectation that it could increase, if needed, by modification without violation of the existing 120 km separation criteria.

Second, the Commission should permit 220-222 MHz stations to propose directional antennas to enhance operational flexibility. This will permit licensees to relocate primary transmitters and locate fill-in transmitters much closer to the boundaries of any authorized service contours, thus enhancing the licensees' ability to serve subscribers. The Commission now recognizes the use of directional antennas in competitive services, such as short-spaced 800 MHz SMR.

Third, in response to paragraph 13 of the 4th NPRM, the Commission should provide protection for the licensee's initially authorized service contour for the longer of (a) the original five-year license term or (b) two years beyond the Commission's final adoption of a service-contour definition for 220-222 MHz licensees. This will allow sufficient time for licensees to

---

<sup>12/</sup> 4th NPRM, ¶15. As set forth above, Roamer favors the Commission's deferral of any decisions on service contours until the completion of Phase I licensing, i.e., as part of the decision on the 2nd MO&O/3rd NPRM in this docket.

construct their modified systems and then use real-world coverage to determine whether fill-in transmitters will be required.

Fourth, the Commission should clarify its proposal (4th NPRM, ¶11) to allow an alternative "technical showing, using established terrain models, to justify the use of higher powers and antenna heights." Does this mean that a licensee in the area of rough terrain may apply for power or height levels which appear to increase its 38 dBu contour under the Commission's model but which in fact do not increase the contour once actual terrain is considered?

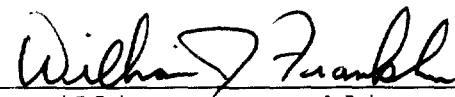
These issues highlight the hidden regulatory complexity of the Commission's modification proposal. Although the AMTA modification proposal should be adopted, if the Commission proceeds as it proposed it must resolve these issues in order to have a coherent regulatory structure.

#### CONCLUSION

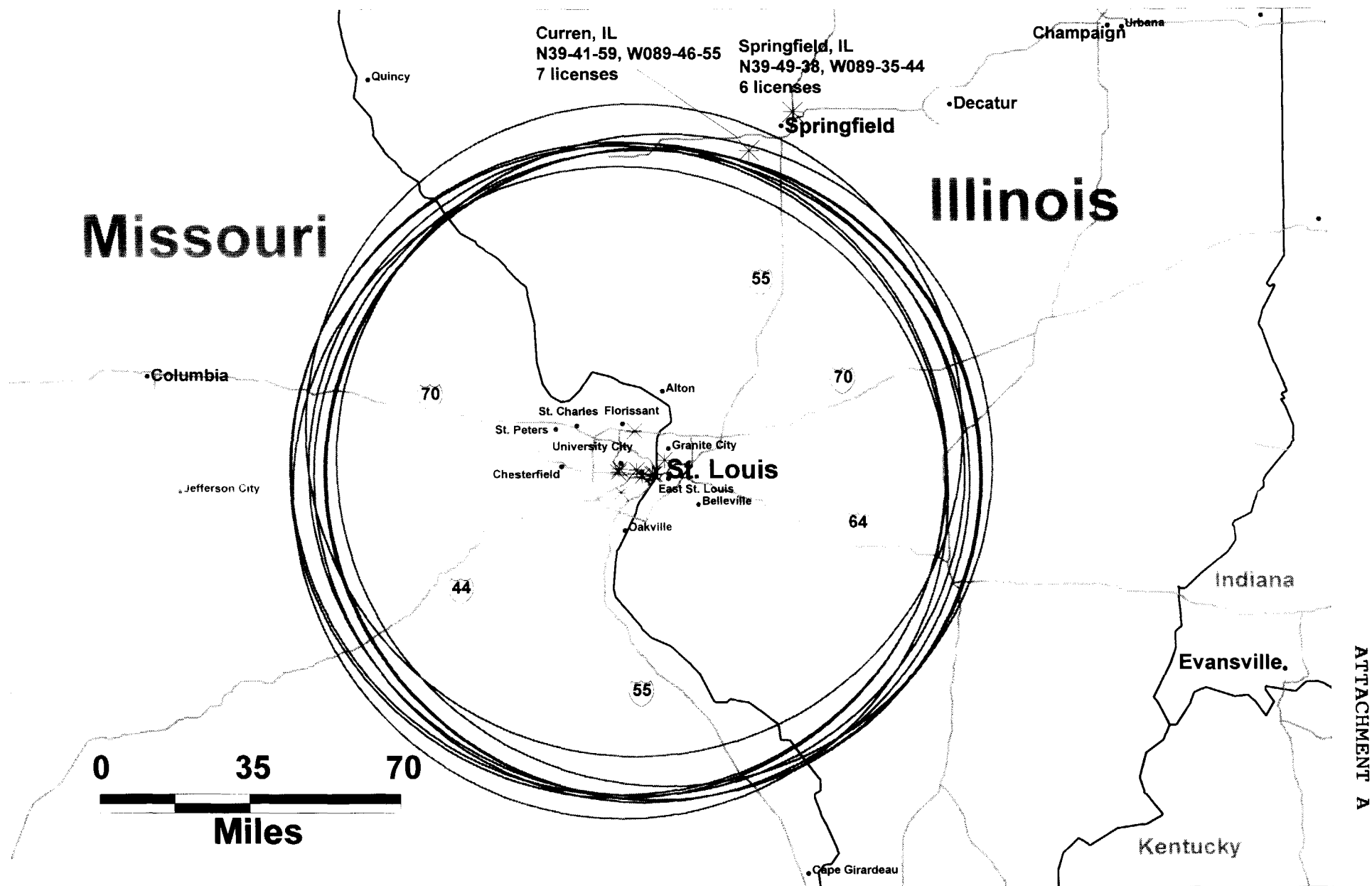
Accordingly, Roamer hereby respectfully requests that the Commission adopt rules to permit the modification of 220 MHz radio systems as proposed herein.

Respectfully Submitted,

ROAMER ONE, INC.

By:   
William J. Franklin  
Its Attorney

WILLIAM J. FRANKLIN, CHARTERED  
1919 Pennsylvania Avenue, N.W.  
Suite 300  
Washington, D.C. 20006-3404  
(202) 736-2233  
(202) 452-8757 (telecopy)



**120 kilometer co-channel interference boundaries around 17 QT licenses granted within 10 miles of center of St. Louis, Missouri**